

January 29, 2010



U.S. Department  
of Transportation

East Building, PHH – 30  
1200 New Jersey Avenue, Southeast  
Washington, D.C. 20590

**Pipeline and Hazardous  
Materials Safety Administration**

DOT-SP 11592  
(SEVENTH REVISION)

<b>EXPIRATION DATE: December 31, 2013</b>
---

(FOR RENEWAL, SEE 49 CFR § 107.109)

1. GRANTEE: Amtrol Inc.  
West Warwick, RI
2. PURPOSE AND LIMITATIONS:
  - a. This special permit authorizes the manufacture, mark, sale and use of a non-DOT specification steel water pump system tank that exceeds the prescribed maximum outside diameter and wall stress used for the transportation in commerce of compressed air or nitrogen. This special permit provides no relief from the Hazardous Materials Regulations (HMR) other than as specifically stated herein. The most recent revision supersedes all previous revisions.
  - b. The safety analyses performed in development of this special permit only considered the hazards and risks associated with transportation in commerce.
3. REGULATORY SYSTEM AFFECTED: 49 CFR Parts 106, 107 and 171-180.
4. REGULATIONS FROM WHICH EXEMPTED: 49 CFR § 173.306(g) in that the water pump system may not be charged to greater than 40 psig, except as specified herein; § 173.306(g)(1) in that the outside diameter of each water pump system may not exceed 24 inches, except as specified herein; and § 173.306(g)(3) in that the maximum wall stress at the prescribed pressure may not exceed 20,000 psi, except as specified herein.
5. BASIS: This special permit is based on the application of Amtrol Inc. dated November 4, 2009, submitted in accordance with § 107.109.

6. HAZARDOUS MATERIALS (49 CFR § 172.101):

Hazardous Material Description			
Proper Shipping Name	Hazard Class/Division	Identification Number	Packing Group
Air, compressed	2.2	UN1002	N/A
Compressed gas, n.o.s. (air with up to 15% helium)	2.2	UN1956	N/A
Nitrogen, compressed	2.2	UN1066	N/A
Compressed gas, n.o.s. (nitrogen with up to 5% hydrogen)	2.2	UN1956	N/A

7. SAFETY CONTROL MEASURES:

a. PACKAGING - Packaging prescribed is a water pump system tank constructed of ASTM 620 low carbon, killed, deep-drawn steel as shown on AMTROL Inc. drawing nos. 147-144 Rev. B and 150-39 Rev. B; and § 173.306(g) except as follows:

- (a) § 173.306(g)(1) - Applies except that the outside diameter may not exceed 26 inches.
- (b) § 173.306(g)(3) - The stress at pressure must not exceed 25,000 psi using the formula:

$$S = Pd/2t$$

Where:

S = wall stress in pounds per square inch;  
P = prescribed pressure for the tank of at least 3 times charged pressure at 70°F or 100 psig, whichever is greater;  
d = inside diameter in inches;  
t = minimum wall thickness, in inches.

- (c) § 173.306(g)(4) - The burst pressure must be at least 8 times the charge pressure at 70°F.

**January 29, 2010**

- (d) § 173.306(g) - Applies except the compressed air may contain up to 15% compressed helium and the tank must not be charged to over 50 psig.

8. SPECIAL PROVISIONS:

a. In accordance with the provisions of Paragraph (b) of § 173.22a, persons may use the packaging authorized by this special permit for the transportation of the hazardous materials specified in paragraph 6, only in conformance with the terms of this special permit.

b. A person who is not a holder of this special permit, but receives a package covered by this special permit, may reoffer it for transportation provided no modification or change is made to the package and it is offered for transportation in conformance with this special permit and the HMR.

c. A current copy of this special permit must be maintained at each facility where the package is offered or reoffered for transportation.

d. Each packaging manufactured under the authority of this special permit must be either (1) marked with the name of the manufacturer and location (city and state) of the facility at which it is manufactured or (2) marked with a registration symbol designated by the Office of Hazardous Materials Special Permits and Approvals for a specific manufacturing facility.

e. A current copy of this special permit must be maintained at each facility where the package is manufactured under this special permit. It must be made available to a DOT representative upon request.

f. MARKING - Packages are exempt from marking and labeling requirements except that the name of contents must be marked on the outside packaging. In addition, each packaging manufactured under the authority of this special permit must be plainly and durably marked "DOT-SP 11592".

9. MODES OF TRANSPORTATION AUTHORIZED: Motor vehicle, rail freight, and cargo vessel.

10. MODAL REQUIREMENTS: A current copy of this special permit must be carried aboard each cargo vessel, aircraft or motor

**January 29, 2010**

vehicle used to transport packages covered by this special permit.

11. COMPLIANCE: Failure by a person to comply with any of the following may result in suspension or revocation of this special permit and penalties prescribed by the Federal hazardous materials transportation law, 49 U.S.C. 5101 et seq:

- o All terms and conditions prescribed in this special permit and the Hazardous Materials Regulations, 49 CFR Parts 171-180.
- o Persons operating under the terms of this special permit must comply with the security plan requirement in Subpart I of Part 172 of the HMR, when applicable.
- o Registration required by § 107.601 et seq., when applicable.

Each "Hazmat employee", as defined in § 171.8, who performs a function subject to this special permit must receive training on the requirements and conditions of this special permit in addition to the training required by §§ 172.700 through 172.704.

No person may use or apply this special permit, including display of its number, when this special permit has expired or is otherwise no longer in effect.

Under Title VII of the Safe, Accountable, Flexible, Efficient Transportation Equity Act: A Legacy for Users (SAFETEA-LU)—"The Hazardous Materials Safety and Security Reauthorization Act of 2005" (Pub. L. 109-59), 119 Stat. 1144 (August 10, 2005), amended the Federal hazardous materials transportation law by changing the term "exemption" to "special permit" and authorizes a special permit to be granted up to two years for new special permits and up to four years for renewals.

12. REPORTING REQUIREMENTS: Shipments or operations conducted under this special permit are subject to the Hazardous Materials Incident Reporting requirements specified in 49 CFR §§ 171.15 - Immediate notice of certain hazardous materials incidents, and 171.16 - Detailed hazardous materials incident reports. In addition, the grantee(s) of this special permit must notify the Associate Administrator for Hazardous Materials Safety -- OHMEA, in writing, of any

**January 29, 2010**

incident involving a package, shipment or operation  
conducted under terms of this special permit.

Issued in Washington, D.C.:

A handwritten signature in blue ink, appearing to read "David By".

for Dr. Magdy El-Sibaie  
Acting Associate Administrator for Hazardous Materials Safety

Address all inquiries to: Associate Administrator for Hazardous  
Materials Safety, Pipeline and Hazardous Material Safety  
Administration, U.S. Department of Transportation, East Building  
PHH-30, 1200 New Jersey Avenue, Southeast, Washington, D.C.  
20590.

Copies of this special permit may be obtained by accessing the  
Hazardous Materials Safety Homepage at  
[http://hazmat.dot.gov/sp\\_app/special\\_permits/spec\\_perm\\_index.htm](http://hazmat.dot.gov/sp_app/special_permits/spec_perm_index.htm)  
Photo reproductions and legible reductions of this special permit  
are permitted. Any alteration of this special permit is  
prohibited.

PO: BMOORE/kah